Middle Rio Grande Endangered Species Collaborative Program Scientific Advisory Panel December 7-9, 2004 Workshop Agenda

Panel Members:

Dr. Lyman McDonald (PAP Chairman) – President and Senior Biometrician –Western EcoSystems Technology, Inc. Cheyenne, WY

Dr. H. Resit Akcakaya – Senior Scientist – Applied Biomathematics, Setauket, NY

Dr. Vincent H. Resh- Professor- Department of Environmental Science, Policy, and Management- University of California, Berkeley, CA

Dr. Harold Tyus – Senior Research Scientist – Cooperative Institute for Research in Environmental Sciences – Golden, CO

Dr. Mel Warren – Aquatic and Terrestrial Fauna Team Leader- Center for Bottomland Hardwoods Research, USDA Forest Service Southern Research Station, Oxford, MS

Morning Day 1: Introduction, workshop objectives and discussion of PAP letter report

8:00 am - *Introductions, workshop objectives and review of Program objectives.* **Pete David**, MRGESCP Program Manager and workshop moderator

8:45 am – Panel discussion on responses generated by PAP letter report. Program attendees will be provided the opportunity to ask for clarification on areas of concern and questions developed by the PAP in their pre-workshop letter report. Adjustments in the schedule for the remaining time will be made as necessary. The designated PAP chair will lead the discussion.

10:00 am - Break

Overview of what is known regarding the physical habitat

10:15 am - Hydrology and Geomorphology overview of the Middle Rio Grande. Paul Tashjian, U.S. Fish and Wildlife Service

10:45 am – Water limitations in the Middle Rio Grande; implications for silvery minnow recovery. **Dick Kreiner**, U.S. Army Corps of Engineers

11:15 am - Description of RGSM nursery habitat: an experimental approach. Mickey Porter and Tamara Massong, U.S. Bureau of Reclamation.

12:00 – Lunch

<u>Afternoon Day 1: Current RGSM research and monitoring of physical and biotic habitat</u>

1:00 pm – Fish Passage for the Rio Grande Silvery Minnow at Irrigation Diversion Dams. **Sterling Grogan**, Middle Rio Grande Conservancy District

1:30 pm - Egg drift on the Pecos River, implications for the conservation of pelagic spawning fish. Nic Medley, New Mexico Interstate Stream Commission

2:30 pm - A water quality assessment of silvery minnow habitats in the Middle Rio Grande, 2002-03. Cyndie Abeyta and Joel Lusk, U.S. Fish and Wildlife Service

3:15 pm - Break

Defining Recovery in the MRG

Presentations should emphasize the definition of a viable RGSM population in the MRG, tools available to establish measurable population viability and recovery criteria, and address the questions highlighted in boxes in the **Recovery Section** of the PAP pre-workshop letter report. What are the important research questions to answer (or other variables to measure) in order to define recovery and focus implementation efforts? Presentations will be followed by a panel discussion.

3:30 pm – Summary of current silvery minnow recovery plan and update on latest version. **Jim Brooks**, USFWS – New Mexico Fishery Resources Office

4:30 pm –Silvery minnow recovery; the Pueblo perspective. **Alex Puglisi**, Pueblo of Sandia

Morning Day 2: Current recovery efforts and methods for monitoring for status and trend in RGSM abundance

Presentations will emphasize the current monitoring methods and review site selection procedures and criteria, site locations with maps, field data collection procedures, and address the questions highlighted in boxes in the **Monitoring Section** of the PAP pre-workshop letter report. Presentations will be followed by a panel discussion on the adequacy of current monitoring for status and trend of RGSM and storage and retrieval of electronic data in the Rio Grande Fish Population Monitoring Database.

8:00 – Experimental augmentation and monitoring for RGSM. **Jason Remshardt**, USFWS-New Mexico Fishery Resources Office.

9:00 - Captive propagation methods of the RGSM rearing and breeding facility. **Chris Altenbach**, City of Albuquerque.

10:00 - Break

10:15 - Genetic consequences of supportive breeding in RGSM. Megan Osborne, University of New Mexico

12:00 - Lunch

<u>Afternoon Day 2</u>: <u>Estimation of the Size (Abundance) of the RGSM Population Sampling</u>

The presentations will focus on alternative strategies for evaluating RGSM response to environmental conditions the MRG, and address potential alternate strategies for recovery. Panel discussion on development of a long-term monitoring program: site selection procedures, field data collection protocols, and modeling that will allow evaluation of recovery criteria, action implementation, action effectiveness, and recovery progress. Will the monitoring program adequately measure or predict potential management impacts to the species such as water quantity and timing of water deliveries, water quality changes, stochastic events (e.g. river drying).

1:00 - *URGWOPS Aquatic Habitat Model*. **Mickey Porter**, U.S. Bureau of Reclamation

2:00 - Ecosystem dynamics of the RGSM in New Mexico; implications for RGSM conservation. Mike Hatch, U.S. Fish and Wildlife Service

Morning Day 3: Monitoring for status and trend in RGSM abundance

Panel and participant discussion on the purpose of population sampling (how will this data be used or what questions will the data be used to answer?) and the adequacy of current population survey protocol for estimating RGSM populations and measuring recovery program success. Discussion will focus on questions and issues highlighted in boxes in the **Monitoring** section of the PAP letter report

8:00 am - Summary of the RGSM Reproductive Monitoring efforts (1999-2004). **Steve Platania**, University of New Mexico

9:00 am - 1993-2004 Rio Grande Silvery Minnow Population Monitoring: Evolution of the Project and Documenting Trends. Robert Dudley, University of New Mexico

Afternoon Day 3: Program Synthesis

Continuation of the morning session and discussion on the next steps for the Program to take in order to begin implementation and evaluation of recovery actions. Discussion might also include recommended methods for successful integration of the RGSM Recovery Team and the MRG ESA Collaborative Program. The panel will also outline the process for completion of the final report.